# UNITED STATES PATENT AND TRADEMARK OFFICE

| APPLICATION NO. | FILING DATE | . | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|---|---|---|---|---|
| 09/894,261 | 06/28/2001 | | Gary M. Lewis | 2386.2003-002 | 5056 |

21005          7590          09/12/2006

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| EXAMINER |
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| ART UNIT | PAPER NUMBER |
|---|---|
| 2154 | |

DATE MAILED: 09/12/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

1)☒ Responsive to communication(s) filed on <u>05 June 2006</u>.

2a)☒ This action is **FINAL**.       2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

4)☒ Claim(s) <u>1-17</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-17</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

## Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>06/05/2006</u>.

4)☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

## DETAILED ACTION

1.      Claims 1-17 are presented for examination.


### *Specification*


2.      Examiner requests Applicants to update status of any related co-pending application as

mentioned in the specification.


### *Response to Arguments*


3.      Applicant's arguments filed 06/05/2006 have been fully considered but they are not

persuasive.


4.      As per remarks, Applicants' argued that (1) Ho reference does not teach or suggest

"dropping the detected idle data by not forwarding the data packet over the IP network" as

recited in claim 1.


5.      As to point (1), Ho discloses a system for transmitting multiple circuits by encapsulating

in a CESIP packet [ Figures 3 and 4; col 5, lines 33-36; and col 6, lines 12-21 ], and during

configuration, the idle condition option determines how idle conditions are to be treated [ col 6,

lines 58-59 ], wherein if a sending IWF receives an idle pattern in the input data stream, there is

not need to transmit the idle data, the idle data field for the idle circuit can be dropped off the

packet [ i.e. dropping the detected idle data ] [ col 6, lines 61-65 ] and in the case of a multiple

circuit packet where only one circuit is idle, the idle circuit may be excluded from the packets

being sent at 8 KHz and only included in one packet per second [ i.e. not forwarding the packet

data ] [ col 7, lines 3-6 ].  Furthermore, Yamano discloses the transmitter circuit does not

transmit idle information, the transmitter circuit only sends information when there is meaningful

packet data available to be sent [ i.e. dropping the detected idle data by not forwarding the data

packet over the IP network ] [ col 13, lines 64-67 ].


6.      As per remarks, Applicants' argued that (2) Yamano does not teach or suggest 1) detects

no data packets are received from another Internet node and 2) regenerates idle data to maintain a

connection between modems.


7.      As to point (2), it is rejected for similar reasons as stated in previous Office Action.

Furthermore, Yamano discloses the receiver circuit detects the start of the idle information [ i.e.

detect no data packets are received from another Internet node ] [ col 4, lines 6-9 ] and an idle bit

pattern, which is synchronous with the idle bit pattern generated by the associated transmitter

circuit, is converted to a plurality of expected idle symbols, the expected idle symbols are then

compared with a plurality of soft symbols which are generated by the receiver circuit in response

to the analog signal using reduced processing within the receiver circuit [ i.e. regenerate idle data

to maintain a connection ] [ col 4, lines 9-18 ].

## Claim Rejections - 35 USC § 103

8.      The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

9.      Claims 1, 2, 4-6, 8-10, 12-15 and 17 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Ho [ US Patent No 6,870,837 ], in view of Yamano et al. [ US Patent No

6,445,731 ].

10.     As per claim 1, Ho discloses the invention substantially as claimed including a method

implemented in an Internet node for reducing Internet bandwidth used for VoIP modem, a first

modem coupled to the Internet node and a second modem coupled to another Internet node, the

method comprising:

upon detecting idle data received from the first modem over a GSTN network to forward

to the other Internet node over the IP network in the payload of a data packet, dropping the

detected idle data by not forwarding the data packet over the IP network [ col 6, lines 58-col 7,

lines 6 ].

Ho does not specifically disclose

upon detecting no data packets received from the other Internet node over an IP network

to transmit to the first modem, regenerating idle data at the Internet node to transmit to the first

modem, the regenerated idle data used to maintain a connection between the first modem and the

second modem.

Yamano discloses

upon detecting no data packets received from the other Internet node over an IP network

to transmit to the first modem, regenerating idle data at the Internet node to transmit to the first

modem, the regenerated idle data used to maintain a connection between the first modem and the

second modem [ i.e. framer 102 generates idle information ] [ 102, Figure 1; col 1, lines 33-55;

and col 3, lines 47-57 ].

It would have been obvious to a person skill in the art at the time the invention was made

to combine the teaching of Ho and Yamano because Yamano's teaching of generating idle data

would allow communication devices to maintain their connections during silence period.


11.     As per claim 2, Ho discloses the idle data is "FF" [ i.e. idle flag can be set [ i.e. set to 1 ] ]

[ col 6, lines 57-64 ].


12.     As per claim 4, Ho discloses wherein the Internet node is an Internet Gateway [ 120, 140,

Figure 1; and col 3, lines 16-25 ].


13.     As per claims 5, 6 and 8, they are rejected for similar reasons as stated above in claims 1,

2, and 4.

14.     As per claims 9, 10 and 12, they are rejected for similar reasons as stated above in claims

1, 2, and 4.


15.     As per claim 13, it is rejected for similar reasons as stated above in claim 1.


16.     As per claim 14, Ho discloses wherein the idle data is transmitted over the IP network in

a modem relay payload of the data packet [ Figure 1; Abstract ].


17.     As per claim 15, Ho does not specifically disclose wherein the data packet includes an

RTP header.  Yamano discloses wherein the data packet includes an RTP header [ i.e. real time

information such as voice and video ] [ col 1, lines 21-31 ].  It would have been obvious to a

person skill in the art at the time the invention was made to combine the teaching of Ho and

Yamano because Yamano's teaching of RTP protocol would allow to transmit variety of traffic

data including voice and video.


18.     As per claim 17, Yamano discloses establishing a modem connection between the first

modem and the second modem [ Abstract; and col 1, lines 19-32 ].


19.     Claims 3, 7 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ho [

US Patent No 6,870,837 ], in view of Yamano et al. [ US Patent No 6,445,731 ], and further in

view of Cidon et al. [ US Patent No 5,343,473 ].

20.     As per claim 3, Ho and Yamano do not specifically disclose wherein the idle data is

"7E". Cidon discloses wherein the idle data is "7E" [ col 4, lines 54-60 ]. It would have been

obvious to a person skill in the art at the time the invention was made to combine the teaching of

Ho, Yamano and Cidon because Cidon's teaching would allow to identify and process any data

information.


21.     As per claims 7 and 11, they are rejected for similar reasons as stated above in claim 3.


22.     Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ho [ US Patent

No 6,870,837 ], in view of Yamano et al. [ US Patent No 6,445,731 ], and further in view of

Byers [ US Patent No 5,959,996 ].


23.     As per claim 16, Ho and Yamano do not specifically disclose wherein the idle data

transmitted over the GSTN network is encoded in a PCM stream. Byers discloses wherein the

idle data transmitted over the GSTN network is encoded in a PCM stream [ col 2, lines 33-36 ].

It would have been obvious to a person skill in the art at the time the invention was made to

combine the teaching of Ho, Yamano and Byers because Byers' teaching of PCM would allow to

receive and transmit information data as is used in the telephone art and ISDN data [ Byers, col

2, lines 33-37 ].

**24.     THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time

policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

MONTHS of the mailing date of this final action and the advisory action is not mailed until after

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the mailing

date of this final action.

### *Conclusion*

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Dustin Nguyen whose telephone number is (571) 272-3971. The

examiner can normally be reached on flex schedule.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Follansbee John can be reached on (571) 272-3964. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Dustin Nguyen
Examiner
Art Unit 2154